

**Logic For Temporary Barrier Implementation in Planning Studies As Of 04/29/04.
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Daily SJR Flow

Get monthly outputs from three paths from the CALSIM II dss file:

//C639/FLOW-CHANNEL////

//C639CYCLE2/FLOW-CYCLE2////

//C639CYCLE5/FLOW-CYCLE5////

Consolidate into one daily path as follows:

For June 1 – March 31 use C639.

For April 1 – 14 and May 16 – 31 use C639CYCLE2.

For April 15 – May 15 use C639CYCLE5.

Temporary Barrier Setup

(HORB = Head of Old River Barrier, GLCB = Grant Line Canal Barrier, ORTB = Old River at Tracy Barrier, and MRB = Middle River Barrier)

Loop though each day of the year.

Track the date and the corresponding SJR flow.

Depending on the date use the appropriate time period and the decision process within.

VAMP period (Apr15 – May15)

Head of Old River Barrier (HORB)

Do not install until $SJR < 5000\text{cfs}$

Use low flow configuration until flow exceeds 7500cfs

Use high flow configuration over 7500cfs

Take out if flow exceeds 8500cfs and do not put back in for the remainder of the VAMP period.

Grant Line Canal Barrier (GLCB, ag barrier)

Only install if HORB is installed (GLCB installation here is only the input of a boat ramp, which has negligible effect on flow)

Middle and Old River at Tracy Barriers (MRB and ORTB, ag barriers)

Only install if HORB is installed.

If the HORB is removed change the configurations tied open culverts

PostVAMP period (May 16 – May 31)

HORB – Not installed

Ag barriers –

Out if they have yet to be installed and SJR flow is above 12,000cfs.

Otherwise installed with culverts tied open.

Summer (Jun 1 – September 15)

HORB – Not installed

Ag Barriers –

If the barriers have yet to be installed and the flow is above 12,000cfs do not install. (they may not be needed)

Otherwise they should be in with flap gates operating.

Fall period (September 16 – November 30)

HORB –

Install with notch when SJR is below 5000cfs

Take out if flow exceeds 8500cfs and leave out for the remainder of the fall period.

If installed then taken out, do not install again for the fall.

Ag Barriers –

The barriers are not installed if they have yet to be installed and SJR flow is above 12,000cfs.

If the barriers have been removed in this period do not reinstall them.

Take out if the HORB has been removed and SJR flow is above 18,000csf.

Otherwise put in with the notch configuration.

Winter period (December 1 – April 14)

All barriers are out.

*** **ALSO Anytime** SJR flow is above 18,200cfs no barriers should be in due to flooding.